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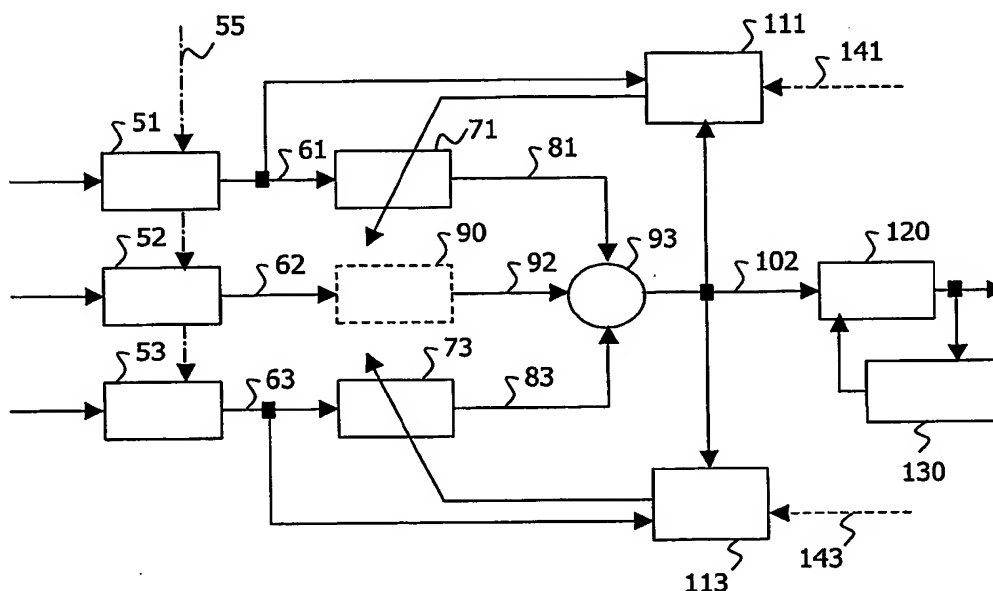
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(54) Title: **CROSS-TALK CANCELLATION SCHEME FOR RLL-BASED STORAGE SYSTEMS**



(57) Abstract: The invention relates to Run length Limited-codes storage systems. In modern storage systems, the inter-track spacing is chosen to be relatively small to allow for high storage densities. As a result, when reading a target track, data written on side tracks may appear in the recovered signal. This inter-track interference is called cross-talk. The invention proposes a cross-talk cancellation scheme based on the minimization of the mismatch between the actual ( $dm+1m$ ) and the expected ( $exp$ ) run length between two transitions ( $xm, xm+1$ ) of the ( $dm+1, m$ ) signal. The proposed solution significantly improves the ramp-up properties of the receiver and allows more efficient hardware implementation.



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